The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

# UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte EARLE HARRY SHERROD, STEPHEN BRADFORD COOK, DAVID ARTHUR FELL, CORNELIS JACOBUS BOSSELAAR, COURTNEY M. NELSON, PAUL JOSEPH DATTA and MARY ANNE BRUEMMER-PRESTLEY

Appeal 2006-1804 Application 09/825,609 Technology Center 3700

Decided: February 28, 2007

Before HUBERT C. LORIN, JENNIFER D. BAHR, and ROBERT E. NAPPI, Administrative Patent Judges.

BAHR, Administrative Patent Judge.

# STATEMENT OF THE CASE

Earle Harry Sherrod et al. (Appellants) appeal under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 1-3, 6, 9-14, and 18-22, the only claims pending in the application. We have jurisdiction over this appeal under 35 U.S.C. § 6.

We REVERSE.

#### THE INVENTION

Appellants' invention is an absorbent insert, for use with absorbent garments, having a body-facing outer surface, a garment-facing outer surface, at least one absorbent layer, and at least one delay layer adapted to substantially affect the flow of fluid through the insert. (Specification 1). The delay layer is positioned between the at least one absorbent layer and the garment-facing outer surface. Claim 1 is representative of the claimed subject matter and reads as follows:

1. An absorbent insert for use with an absorbent garment configured to allow fluid to pass therethrough to said absorbent garment, the insert comprising:

a body-facing outer surface and a garmentfacing outer surface, said garment-facing outer surface being at least partially fluid permeable and having a pore size that will readily allow the passage of liquids therethrough;

at least one absorbent layer having a first primary surface and a second primary surface; and

at least one water insoluble continuous fluid impermeable delay layer adapted to substantially affect the flow of fluid passing through the insert, said at least one continuous fluid impermeable delay layer having a first primary surface and a second primary surface;

wherein the surface area of each of said primary surfaces of said at least one water insoluble continuous fluid impermeable delay layer is less than the surface area of each of said primary surfaces of at least one of the said at least one absorbent layers; and wherein said at least one delay layer is positioned between said at least one absorbent layer and said garment-facing outer surface.

# THE EVIDENCE

The Examiner relies upon the following as evidence of unpatentability:

Poulsen	US 2,929,379	Mar. 22, 1960
Matsuda	US 3,612,054	Oct. 12, 1971
Fujioka <sup>1</sup>	EP 945 110 A2	Sep. 29, 1999

## THE REJECTIONS

Appellants seek review of the Examiner's rejections under 35 U.S.C. § 103(a) of claims 1-3, 6, 9, 12-14, and 18-22 as being unpatentable over Fujioka in view of Matsuda and claims 10 and 11 as being unpatentable over Fujioka in view of Matsuda and Poulsen.

The Examiner provides reasons in support of the rejections in the Examiner's Answer (mailed September 6, 2005). Appellants present opposing arguments in Appellants' Brief (filed June 24, 2005) and Reply Brief (filed October 27, 2005).

<sup>&</sup>lt;sup>1</sup> The Examiner and Appellants refer to this reference as "Unicharm."

#### **ISSUE**

The first issue in this appeal is whether Fujioka's area of openings 31a and the portion of backing layer 31 forming a border surrounding the area of openings respond to the delay layer and garment-facing outer surface, respectively, recited in claim 1. This issue was raised by the Examiner in response to arguments in Appellants' Brief (Answer 7). Although the Examiner raised the issue merely in the form of an argument that "could" be made and opted not to make a new ground of rejection, we address the issue in the interest of fairness to Appellants.

The main issue presented in this appeal is whether the combined teachings of Fujioka and Matsuda would have suggested providing a delay layer in Fujioka's absorbent article as proposed by the Examiner to arrive at the claimed invention.

#### FINDINGS OF FACT

Fujioka discloses an absorbent article for use inside a disposable diaper (col. 1, ll. 4-5). The absorbent article is adapted to solve the problem presented by prior art absorbent articles that excess liquid flows to the side or periphery of the disposable diaper rather than to the center of the diaper, because the backing layer of the prior art absorbent article is impermeable to liquid and faces the center of the diaper. The periphery of the conventional disposable diaper does not sufficiently absorb urine, thereby causing it to leak to the sides of the diaper (col. 1, ll. 37-45).

Fujioka solves the above-noted problem by providing an absorbent article having a backing layer 22 (Fig. 1(C) embodiment) or 31 (Fig. 6(B) embodiment) made of liquid-impermeable material but provided with centrally located openings 22a (Fig. 1(C)) or 31a (Fig. 6(B)) to permit passage of liquid from the absorbent core 23 through the central area of the backing sheet (col. 4, ll. 30-35; col. 8, l. 19-39). Fujioka's openings 22a or 31a are situated substantially at the center of the absorbing area (absorbent core 23) and the area of the openings 22a is smaller than that of the absorbing area (col. 4, ll. 41-43), while the openings 31a cover the absorbent core almost entirely (col. 8, ll. 31-32). The absorbent core absorbs a large portion of the urine but permits any remaining urine exceeding the absorbing capacity of the core to pass through the openings 22a or 31a in the backing layer to be absorbed by the absorbent body 4 of the disposable diaper 1. Upon passing through the openings 22a or 31a, the urine moves mostly to the center of the absorbent body 4 of the diaper where it is absorbed. The urine thus will not leak at the sides of the diaper (col. 6, l. 54 to col. 7, l. 10).

The Examiner concedes that Fujioka lacks a continuous fluid impermeable delay layer, as recited in claim 1 (Answer 4). Independent claims 10 and 19 also require a continuous fluid impermeable delay layer.

Matsuda discloses a sanitary napkin provided with one or more barrier sheets of "completely liquid repellent" material disposed between absorbent layers 8, 8a (col. 1, ll. 26-35). The barrier sheet is expressly provided to cause the liquid flowing through the first absorbent layer 8 to spread laterally and longitudinally along the barrier sheet to utilize the absorbing capacity of the absorbent layers more effectively (col. 2, ll. 18-26).

## PRINCIPLES OF LAW

While it is true that the claims in a patent application are to be given their broadest reasonable interpretation consistent with the specification during prosecution of a patent application (*see, for example, In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)), it is also well settled that terms in a claim should be construed as those skilled in the art would construe them (*see Specialty Composites v. Cabot Corp.*, 845 F.2d 981, 986, 6 USPQ2d 1601, 1604 (Fed. Cir. 1988) and *In re Johnson*, 558 F.2d 1008, 1016, 194 USPQ 187, 194 (CCPA 1977)). Further, the claims do not stand alone but, rather, are part of a fully integrated written instrument consisting principally of a specification that concludes with the claims and, thus, must be read in view of the specification, of which they are a part. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1315, 75 USPQ2d 1321, 1327 (Fed. Cir. 2005).

Where obviousness is based on a combination of prior art references, the fact finder must determine what the prior art teaches, whether it teaches away from the claimed invention, and whether it motivates a combination of the teachings of the references to arrive at the claimed invention. *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1363, 80 USPQ2d 1641, 1647 (Fed. Cir. 2006).

A reference teaches away when a person of ordinary skill, upon examining the reference, would be discouraged from following or would be led in a direction divergent from the path that was taken by the applicant. *In re Gurley*, 27 F.3d 551, 553, 31 USPQ2d 1130, 1131 (Fed. Cir. 1994)

#### **ANALYSIS**

We begin by first putting to rest the Examiner's untenable position that the delay layer and garment-facing outer surface recited in Appellants' claim 1 are met by the area of Fujioka's backing layer 31 having openings 31a and the area of backing layer 31 surrounding the area with openings, respectively. The skilled artisan, having read Appellants' disclosure, would read the "garment-facing outer surface" recited in Appellants' claim 1 on Fujioka's entire backing layer 31, not just the border portion thereof. The skilled artisan thus would consider the area of backing layer 31 having openings 31a to be part of the "garment-facing outer surface" and *not* a delay layer

positioned between the garment-facing outer surface and said at least one absorbent layer, as called for in Appellants' claim 1. Accordingly, the theory espoused by the Examiner (Answer 7) that Fujioka discloses all elements of claim 1, cannot form a reasonable basis upon which to sustain the Examiner's rejection.

Fujioka's objective is to direct any excess liquid not absorbed by the absorbent core of the absorbent pad insert toward the center of the disposable diaper, so that the liquid absorbed by the diaper will not leak out the sides of the diaper. A person of ordinary skill in the art would certainly have appreciated from Matsuda that the absorbing capacity of Fujioka's absorbent core could be more effectively utilized by providing one or more liquid repellent barrier sheets within the core to spread the flow across the core.

The skilled artisan would also have recognized from Fujioka, however, that liquid repellent barriers, if placed within Fujioka's absorbent core 23 as taught by Matsuda, would direct the liquid toward the periphery of the absorbent core, thereby encouraging excess liquid to flow outward from the periphery of the absorbent pad insert and hence toward the periphery of the diaper. Flow of excess liquid away from the center and toward the periphery of the diaper is precisely what Fujioka seeks to avoid. Consequently, one of ordinary skill in the art would have been dissuaded from providing a barrier

sheet in Fujioka's absorbent core regardless of the increased absorbing capacity that might result from such a modification. While the skilled artisan would have been interested in increasing the absorptive capacity of the absorbent core, the combined teachings of Fujioka and Matsuda would have led the skilled artisan away from utilizing the particular approach of Matsuda in Fujioka's pad.

We therefore conclude that the combined teachings of Fujioka and Matsuda would not have suggested providing a delay layer in Fujioka's absorbent article to arrive at the claimed subject matter. We cannot sustain the Examiner's rejection of claims 1-3, 6, 9, 12-14, and 18-22 as being unpatentable over Fujioka in view of Matsuda.

The Examiner's application of Poulsen does not make up for the deficiency of the combination of Fujioka and Matsuda discussed above. We thus cannot sustain the rejection of claims 10 and 11 as being unpatentable over Fujioka in view of Matsuda and Poulsen.

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# **SUMMARY**

The decision of the Examiner is REVERSED.

# **REVERSED**

HUBERT C. LORIN Administrative Patent Judge	·) )
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ROBERT E. NAPPI Administrative Patent Judge	) ) )

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